CASE STUDY

International technology company leverages TPx bandwidth, redundancy, and datacenter to move corporate applications to the Cloud

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>
> *Ruben Landeros Jr.*
> *IT Manager,*
> *ZyXEL Communications*

ZyXEL Communications is a global provider of secure broadband networking, Internet connectivity and routing equipment. As companies seek to take advantage of Cloud services to reduce costs and improve information technology effectiveness, they become more dependent on the performance of wide area networks. With key applications no longer residing on servers at the corporate headquarters, high-bandwidth low-latency access to the Cloud can make the difference between success and failure. And those networks must be always available, because when the applications are no longer under direct local control of IT managers, the end users could be cut off from the tools they need to do their jobs if the networks are less than 100% reliable.

PROFILE

- Broadband networking provider
- U.S. headquarters in Anaheim with global HQ in Taiwan

CHALLENGE

Moving corporate WAN applications to the Cloud without sacrificing speed, availability and redundancy

SOLUTION

100 Mbps fiber Internet access; 10 Mbps fixed wireless redundancy; virtualized file replication servers in datacenter

BENEFITS

- Bandwidth capacity to handle periods of peak usage and data spikes up to 5GB
- Real-time data replication with virtualized servers in a secure, geographically separated datacenter
- Ethernet hand-off for allocation of bandwidth on separate VLANs; wireless redundancy

RESULTS

TPx is changing the model of how ZyXEL manages its data, adding speed and efficiency

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THE CHALLENGE

ZyXEL needed to upgrade its Internet access bandwidth to support remote applications including Cloud-based File Systems. And with the advent of Cloud-based applications comes increased dependency on wide area networks. Should a road construction crew accidentally cut the fiber line, the company needed to still be able to access its remote applications. Powerful datacenter backup for mission critical data was a third component of the deployment.

THE SOLUTION

ZyXEL chose a dedicated 100Mbps fiber optic solution from TPx. An average utilization of 30Mbps on the 100Mbps loop ensures sufficient excess capacity to handle periods of peak usage and data spikes from 5GB file transfers without impacting Cloud application performance. The fiber optic bandwidth is delivered to the customer with an Ethernet hand-off so they can allocate bandwidth on separate VLANs to internal departments.

The company also kept its preexisting fixed wireless circuit to provide a physically diverse alternate route to the Internet. In addition, it colocated its virtualized file replication servers in a highly secure TPx datacenter, where it can back up and restore all of its mission critical data. In order to continually replicate files in real time on a 24x7 basis, data is transferred over a 20Mbps Internet VPN to the datacenter. Since ZyXEL's North American headquarters is in Anaheim, the company selected a TPx datacenter located in Las Vegas, which is located well outside the Southern California seismic zone in an area not subject to the natural disasters that typically occur in other parts of the country.

The company also linked its Anaheim offices to its global headquarters in Taiwan via the same TPx's MPLS Extended Reach network for reliable and cost-effective communications around the clock.

"The Cloud is changing the model of how we manage our data," said ZyXEL Information Technology Manager Ruben Landeros Jr. "The old model is that applications reside on centralized servers that are managed and maintained by the corporate IT staff. That means the staff is continually engaged in supporting the software apps by performing routine maintenance such as patches and upgrades, and buying and installing new hardware. As we deploy those applications to the Cloud, the IT staff can be refocused on their main mission, which is developing new customer applications."